REMARKS

This application has been reviewed in light of the Final Office Action mailed on September 15, 2004. Claims 1-43, 50-53 and 59 are pending in the application with Claims 1, 50 and 59 being in independent form. By the present amendment, Claims 1, 50 and 59 have been amended. No new matter or issues are believed to be introduced by the amendments.

Before addressing the rejections under 35 U.S.C. §102(b) and §103(a), Applicant respectfully submits that independent Claims 1 and 50 are generic. Accordingly, Applicant continues to respectfully request reconsideration and reinstatement of previously withdrawn dependent Claims 2, 3, 5, 7-13, 15-24, 26-31, 33-39, 43 and 53-55 which depend from generic, independent Claims 1 and 50 in accordance with 37 C.F.R. §1.141.

Claims 1, 4, 6, 14, 50-52 and 59 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,085,893 issued to Durley, III on April 25, 1978 ("Durley, III"). Applicant has amended independent Claims 1, 50 and 59 to better define Applicant's invention and to patentably distinguish over the devices disclosed by Durley, III.

It is Applicant's belief that independent Claims 1, 50 and 59 as presently presented patentably distinguish Applicant's invention over the devices disclosed by Durley, III. Applicant's Claims 1, 50 and 59 recite a structurally and functionally different apparatus than the devices disclosed by Durley, III as emphasized by the portions underlined below. Hence, Claims 1, 50 and 59 are not anticipated by the devices disclosed by Durley, III.

Applicant's Claim 1 recites:

A removable nozzle for ultrasound wound treatment, for producing a spray of liquid using an ultrasound transducer having a tip, directing and delivering said spray onto the wound surface, comprising:

a main body supported on an ultrasound transducer, the main body having a proximal end that removably attaches to a housing of the ultrasound transducer,

said main body also having a distal end which is marginally close to a distal end of the ultrasound transducer tip,

said distal end of said main body having a gap with said distal end of said ultrasound transducer tip,

said distal end of said main body being coaxially placed about said ultrasound transducer tip,

said main body defining an opening and being connected with at least one reservoir, for holding and delivering a wound treatment solution at a most distal end of said ultrasound transducer tip via said opening disposed about the most distal end of the ultrasound transducer tip for producing said spray,

wherein said spray is delivered through said nozzle. (Emphasis added)

Applicant's Claim 50 recites:

An apparatus for treating a wound comprising:

a transducer having a most distal end, said most distal end having a distal radiation surface configured for being arranged in proximity to the surface of the wound and for emitting ultrasonic energy; and

a removable nozzle comprising:

a fluid source; and

a main body supported on said transducer, said main body having a proximal end that removably attaches to a housing of said transducer and a distal end coaxially placed about said most distal end of said transducer, said distal end of said main body defining an opening in fluid communication with said fluid source and disposed about said most distal end of said transducer to produce a spray;

wherein the generated ultrasonic energy is delivered to the wound through the spray which passes through said nozzle, and wherein the ultrasonic energy provides a bactericidal and a therapeutic effect for decreasing the healing time for the wound. (Emphasis added)

Applicant's Claim 59 recites:

A removable nozzle for ultrasound wound treatment comprising:

a holder configured and dimensioned for receiving and holding a liquid reservoir;

a liquid propagation path defining a dispensing orifice and in fluid communication with the liquid reservoir for directing liquid from within the liquid reservoir to a most distal end of an

ultrasound transducer via the dispensing orifice, wherein said ultrasound transducer is positioned within the nozzle for producing an ultrasonic spray and wherein said dispensing orifice is disposed about the most distal end of said ultrasound transducer; and

a housing dimensioned for removably attaching to said ultrasound transducer, for housing at least a portion of the ultrasound transducer, for defining at least a portion of said liquid propagation path defining said dispensing orifice, and for directing the ultrasonic spray through said nozzle towards a wound surface, wherein said housing is supported by said ultrasound transducer. (Emphasis added)

Durley, III does not disclose or suggest at least the emphasized limitations of Applicant's Claims 1, 50 and 59. Durley, III is directed to devices for atomizing a liquid using an ultrasonic transducer 12 and means for imparting ultrasonic vibrations to a vibratory member 14. The devices disclosed by Durley, III are not characterized as removable nozzles which are defined as separate or stand-alone mechanical components for removably attaching to the ultrasonic transducer 12. Furthermore, the devices disclosed by Durley, III are not characterized as nozzles through which a spray generated by the transducer passes or is directed.

With respect to the first embodiment of a device shown in FIGS. 1 and 2 of Durley, III, the device mainly includes a tube or pipe 16 defining an opening for directing water or other liquid to the vibratory member 14 of a transducer 12. The front and tail end masses 22 and 26 of transducer 12 and the pipe 16 are supported by a mounting member 50. An electrode plate 30 clamped between the front and tail end masses 22 and 26 are received in a slot 56 formed in mounting 50. A lead 58 is soldered to the electrode plate 30 and is brought out of the mounting member 50 through an opening 60 therein (see column 4, lined 50-53).

The mounting member 50 is formed of two complementary halves 62a and b which are secured together in a non-removable manner, or substantially permanently, such as by cementing or bonding, so that the mounting member 50 substantially permanently supports the masses 22,

26 together with the electrode plate 30 and lead 58 (see column 4, lines 54-59 and column 5, lines 7-9). The mounting member 50 is further formed integrally with a collecting receptacle 18 (see column 4, lines 62-63), formed of complementary halves 64a and b, which are secured together, substantially permanently, such as by cementing or bonding (see column 5, lines 9-10). Furthermore, the front and tail masses 22 and 26 and the electrode plate 30 are fitted in the mounting member 50 with a clearance 54 so as not to cause undue damping of the ultrasonic vibrations and to prevent the development of any buzzing noises (see column 4, lines 24-33).

With respect to a second embodiment of a device shown in FIGS. 3-5 of Durley, III, a mounting member 114 is molded substantially permanently around piezoelectric elements 28 of the transducer 12 and masses 22 and 28 and cured, providing a fitting including a gap between the mounting member 114 and the housing of the transducer 12 so as not to cause undue damping of the ultrasonic vibrations and to prevent the development of any buzzing noises (see column 6, line 56 – column 7, line 21).

With respect to a third embodiment of a device shown in FIG. 6 of Durley, III, an atomizer 130 is disclosed specifically as applied to a carburetor 132 for supplying atomized fuel to a device requiring fuel, such as an engine. The atomizer is supported by one or more pillars 148 connected between the wall of a conduit 134 and mounting member 150, where the mounting member 150 is molded substantially permanently around the atomizer 130 (see column 8, lines 34-42). Furthermore, atomizer 130 appears to be securely, as opposed to removably, supported by fuel conduits 174 and/or 146 in addition to pillar 148 for stabilizing the vibrating atomizer 130 within the dynamic environment of conduit 134 through which an air stream is provided. Additionally, the atomizer 130 is not removable from within conduit 134 from either

end of conduit 134. One end of conduit 134 is bolted to the manifold 136 of the engine, and access to the atomizer within conduit 134 is further inhibited by the engine. The other end of conduit 134 is blocked by valve 140.

Accordingly, the mounting members 50, 114 or 150 are not removable from the transducers of the first, second or third embodiments of Durley, III, respectively, nor removably attached to a housing of the respective transducers. Furthermore, the fitting of the transducers and their associated components when mounted on the respective mounting members calls for precision, and is not conducive to removal of the respective transducers, their associated components or of the respective mounting members. There is no disclosure or suggestion with respect to the first, second or third embodiment of Durley, III for a removable nozzle or for a nozzle having a housing or a main body having a proximal end which is removably attached to a housing of a transducer as recited in Applicant's Claims 1, 50 and 59.

In the first and second embodiments of Durley, III, the spray does not pass through any components of the devices disclosed by Durley, III. With the respect to the third embodiment of Durley, III, the spray is shown to exit the conduit 134, but conduit 134 is not a removable nozzle, and therefore the spray does not pass through a removable nozzle. Accordingly, Durley, III does not disclose or suggest a spray which is delivered or passes through a removable nozzle, as recited in Applicant's Claims 1, 50 and 59. Additionally, Durley, III does not disclose or suggest an ultrasound transducer positioned within the removable nozzle, as recited in Applicant's Claim 59.

Furthermore, with respect to the transducer of each of the devices of Durley, III, the transducers are supported by the respective mounting members. A main body or housing of a

removable nozzle is not supported on the transducer, as recited in Applicant's Claim 1, 50 and 59.

Applicant further respectfully disagrees with the Examiner's argument that the device may be contained or coaxially placed within a main body/holder of a device that supplies the reservoir, etc. to expel the fluid within the reservoir, wherein the transducer is separable from the main body/holder. Applicant is uncertain as to how to envision such a suggested device. Furthermore, applicant cannot envision such a suggested device in which a main body or housing of a removable nozzle is supported on a transducer, as recited in Applicant's Claim 1, 50 and 59.

Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) with respect to Claims 1, 50 and 59 and allowance of Claims 1, 50 and 59 are respectfully requested.

Claims 4, 6, 14, 51 and 52 depend from Claims 1 and 50, and therefore include the limitations of Claims 1 and 50. Accordingly, for at least the same reasons given for Claims 1 and 50, Claims 4, 6, 14, 51 and 52 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) with respect to Claims 4, 6, 14, 51 and 52 and allowance of Claims 4, 6, 14, 51 and 52 are respectfully requested.

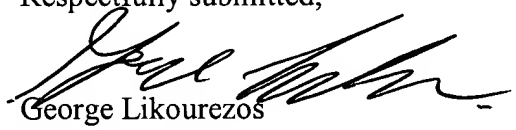
Claims 21, 23, 25, 32 and 40-42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Durley, III.

Claims 21, 23, 25, 32 and 40-42 depend from Claim 1, and therefore include the limitations of Claim 1. Accordingly, for at least the same reasons given for Claim 1, Claims 21, 23, 25, 32 and 40-42 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of Claims 21, 23, 25, 32 and 40-42 are respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application and not previously withdrawn, namely, Claims 1, 4, 6, 14, 21, 23, 25, 32, 40-42, 50-52 and 59, are believed to be in condition for allowance and patentably distinguishable over the art of record. Applicant also respectfully requests the reconsideration and reinstatement of previously withdrawn dependent Claims 2, 3, 5, 7-13, 15-24, 26-31, 33-39, 43 and 53-55 which depend from generic, independent Claims 1 and 50 in accordance with 37 C.F.R. §1.141.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at (631) 501-5706.

Respectfully submitted,



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